

## ABSTRACT

A mover assembly (16) that moves or positions an object (12) along a first axis includes a motor (20) and a coupling assembly (22). The motor (20) includes a motor output (332) that is moved along the first axis and about the first axis. The coupling assembly (22) includes a stage (344) that couples the motor output (332) to the object (12) and a stage guide (346) that guides the motion of the stage (344) along the first axis. In one embodiment, the stage guide (346) is a linear bearing that allows for motion of the stage (344) along the first axis and inhibits motion of the stage (344) about the first axis, along a second axis and along a third axis. Additionally, the coupling assembly (22) can include a measurement system (28) that monitors the movement of the stage (344).